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ABSTRACT

Social perceptual processes are reexamined in order to develop better insight into interpersonal communication selectivity when several stimuli are present. It is argued that stimuli are selected differentially because of the perceiver's experiential codification sophistication: a preference for using some codes rather than others exists in relation to previously learned verbal and nonverbal language development. Interpersonal perceptual selection of transmissions occurs in relation to the receiver's coding expertise in symbolic, sign, action, and object languages. The dominant language processing ability for a particular situation is hypothesized to be instrumental in producing individual differences in perceptual selection of interpersonal messages. (Author)

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SOCIAL PERCEPTUAL PROCESSES IN INTERPERSONAL COMMUNICATION

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Abstract

SOCIAL PERCEPTUAL PROCESSES IN INTERPERSONAL COMMUNICATION

Social perceptual processes are re-examined with the intent of developing better insight into interpersonal communication selectivity when multitudinous stimuli are present. The writer contends that stimuli are selected differentially because of the perceiver's experiential codification sophistication; a preferability for using some codes rather than others exists in relation to previously learned verbal and nonverbal language development. Interpersonal perceptual selection of transmissions occurs in relation to the receiver's coding expertise in symbolic, sign, action, and object languages. The dominant language processing ability for a particular situation is hypothesized to be instrumental in producing individual differences in perceptual selection of interpersonal messages.

SOCIAL PERCEPTUAL PROCESSES IN INTERPERSONAL COMMUNICATION

Perceptual theory includes two major approaches of scientific knowledge concerning how individuals perceptually and cognitively handle their "sensory environments." One approach is sensory psychophysical; a large amount of research in this area is conducted at physiological and neurological levels with a limited number of isolated variables which are quantified in discrete, measurable units. The other approach is experiential and is more amorphous or arbitrary in that stimuli are of importance only in relationship to the consequences for the individual. Perception at the experiential level is referred to as the process where an individual is sensitive toward and discriminates among impinging stimuli in relation to an already existing conceptual frame or evaluative criteria. This paper centers upon the experiential approach and its relationship to human communication.

Harvey et al. (1961, P. 204) proposed a central assumption "that in order to understand a person's behavior in a situation we need to know what conceptual system is operating. The difference in how various people react in the same situation reflects the operation of different conceptual systems." Likewise, the operation of a person's conceptual system determines what aspects of a sensory situation will be relevant

for the person. Broadbent (1958, P. 67) has assembled strong evidence that "the brain will limit the number of tasks that can be performed simultaneously and so part of the information presented must be discarded." Many complexities, then, which intervene in the transition of message stimuli to communicative responses are related to the perceptual process (Aranguren, 1967; Broadbent, 1958; and Ruesch, 1971).

The stimulation, through any codification process or language of symbol, sign, object, or action, which produces a response related to the stimuli is the basis of the process of information acquisition and communication. Language is used here to refer to any classification system of codification which permits transmitted or received meaning to take place between people (Ruesch, 1972). Information acquisition is a discriminating process whereby perception must be selective; some stimuli must be given more attention than others.

Attneave (1954) points out how the organism processes information: when the amount of information to be processed is grossly in excess of the organism's capacity to do so, the organism begins to treat information like an averaging process where the particular bits of information are lost in the economical battle of searching for "larger" patterns of stimuli, and the abstraction level of perception changes. A typical example of "perceptual selection" is seen in the

focusing on the objects in a teletype news photo rather than on the small ink dots which can be observed but only at the loss of the larger details. The perceptual system treats the high complexity pattern as a redundant pattern. The redundant pattern or designated visual display consists of several connected elements perceived at the same time.

Zusne (1970, P. 188) suggests a tentative relationship between visual search and visual form perception. "When visual displays of more than just, say, six or seven individual shapes are used in an experiment, it is likely that the experiment deals with visual search. In visual search tasks, the emphasis is more on information processing than form perception; hence, the particular configuration of any of the elements in the pattern is of secondary importance." This concept suggests that the process of perceiving a visual form is not the same as the process of selectivity of a few stimuli from several possible stimuli.

A major question, then, is why do some people select some particulars (NONVERBAL CUES) while other people select different particulars (VERBAL CUES) in an interpersonal interaction when all of these stimuli have the same general characteristics? In another unpublished paper, this writer has identified eight major types of information seekers in terms of individual differences in handling complex stimuli.*

*Yelsma, Paul. "Verbal and Nonverbal Information Seeking: Two Influences upon Small Group Problem Solving, "Unpublished paper presented at Speech Communication Association Conference, Athens, Ohio, 1973.

Perceptual differentiations among persons are most likely to occur when the external stimulation is HIGH IN AMOUNT, COMPLEX, AND AMBIGUOUS. The perceiver must be selective for his/her own "protection." With many of the tachistoscopic presentations of stimuli, the major limiting factors are threshold speed, set expectation, and repetition. Zusne (1970) suggests that most types of tachistoscopic visual presentations may present problems in applied studies of visibility and legibility of cues, such as in control panels of airplanes or in the accounting for the differences in how people select different stimulus cues in interpersonal communication.

Several other communication researchers (Argyle et al., 1970; Hayes and Maltzer, 1972; Mehrabian and Ferris, 1967; Ruesch, 1972) have indicated that social scientists have been reluctant to look at the perceptual selective processes in the organism that operate to organize the verbal and nonverbal stimuli upon human interaction. Perceptual selectivity, as it is related to individual differences via language proficiency of the individual, may explain why many misunderstandings occur in the various interpretations taking place in interpersonal interaction. Individual's perceptual mechanisms are more value attuned in an interpersonal setting than in a laboratory setting, and more relevant needs are aroused in most situations where the person stands to gain or lose from his interpretations.

Bruner and Postman (1950, P. 206) lay claim for a basic rule that stimuli do not act upon indifferent organisms: "the organism in perception is, in one way or another, in a state of expectancy about the environment... the perceptual effect of a stimulus is necessarily dependent upon the set or expectancy of the organism." Essential, then, to Bruner and Postman's theory of perception are two basic axioms: "that perceiving is a process which results from the stimulation of a prepared organism (and)...given a stimulus input of certain characteristics, directive processes in the organism operate to organize the perceptual field in such a way as to maximize percepts relevant to current needs and expectations and to minimize percepts inimical to such needs and expectations."

Hierarchical levels of perceptual differentiation may very well be the reasons why human information processing is not a linear function of information content. For any sophisticated judgemental perceptual performance to occur, a certain amount of referential or "vocabulary" (verbal or nonverbal) information is necessary.

Several researchers (Dember, 1960; Egeth, 1967; Hake, 1957; Neisser, 1963; Posner and Mitchell, 1967) have identified hierarchical levels of perceptual differentiation in visual search. Zusne (1970, P. 259-260) summarizes these differential perceptual task levels on the basis of the kinds of judgements the organism makes: detection, discrimination,

recognition, identification, and judgement. "In a detection task, the subject judges whether a stimulus is present or not. In a discrimination task, he judges whether a form is different from some other form. In recognition, the observer judges whether he has seen the form previously. In identification, judgement consists of whether a specific stimulus is present or not; in the judgemental task, judgement is made regarding a specific point on a continuum that a form should be assigned to."

Attneave's (1959, P. 82) conceptualization "that perception might be conceived as a set of preliminary 'data-reduction' operations, whereby sensory information is described, or encoded, in a form more economical than that which it impinges on the receptors" accounts for the idea that some form of "vocabulary" must exist before an individual can make classifications of stimuli with accurate interpretations. "Vocabulary" is defined as a collection of meaning-carrying vehicles. These vehicles can range from printed words to very general environmental stimuli such as the location of a person's apartment door in a housing complex.

Several environmental psychologists (Altman, 1971; Esser, 1971; Proshansky, Ittleson, and Rivlin, 1970; Somner, 1969) have established that environmental stimuli act as both independent and dependent variable upon interpersonal communication. These influences are functioning not only

as affects and constraints but also serve as mediums of information and communication. The perceptions and responses from such iconic and nonverbal symbols are extremely difficult to isolate and to measure their effects. This area of perceptual research reflects the almost insurmountable methodological and measurement barriers inherent in the complexity of environmental information.

Egeth (1967, P. 55) purports, from four series of experiments on selective attention, that "recognition, in both vision and audition, is the result of a hierarchy of tests performed upon sensory input. It is possible to adjust the testing procedure so that only a particular pattern or set of patterns will be recognized, all others simply going unrecognized." This helps explain why persons are able to code complex stimuli into values along their component dimensions that may be of particular importance to them and leave other stimuli unattended.

Gibson (1968) states that a perceptual system may be sensitized to one level of information and not to another. An example may help clarify this concept. Mr. A., upon meeting Mr. B. and Mr. C., simultaneously transmits at least two messages, verbal and nonverbal, to both B. and C. However, because of Mr. C.'s lack of nonverbal awareness and the lack of his nonverbal "vocabulary," he will not get the same messages as will Mr. B. Mr. B.'s perception of these subtle nonverbal cues is, in part, due to his nonverbal

awareness and vocabulary. If the situation, persons, and cues were to change appreciably, then more noise enters into the perceptual and cognitive interpretations.

Dick (1969) and Eysenck (1957) contend that perception of stimuli is the result of a series of hierarchical analyses. Some messages are selected with ease while others are ignored. Thus, the selectivity from complex stimuli over prolonged periods of perception may produce a learning of new cues or enlarged "vocabulary" of both verbal and nonverbal vehicles.

Smith (1970, P. 126) points out an interesting alteration to what he calls the traditional cause-and-effect model of perception and motor behavior by incorporating the concept of feedback into perceptual experiences. "When we incorporate the concept of feedback into our thinking, we are using a cybernetic model in which not only does perception lead to behavior, but behavior inevitably alters sensory feedback, both afferent and re-afferent; the resulting multisensory information, in its turn, alters behavior in some measure. Perception guides behavior; behavior guides perception. Cause and effect? Each is both."

Growth of one's perceptual "vocabulary" or the development of verbal and nonverbal codification repetoires (language facilities) can be influential in channeling their attunement to particular stimuli in interpersonal settings. Thus, if we can successfully identify the dominant perceptual coding processes for individuals for "typical interaction situations,"

we can begin to say something about the cues to which different people will attend in similar interpersonal situations and then begin to look at the meaning ascribed to the nonverbal cues.

Research related to why some subjects use nonverbal codes more than other subjects in selecting stimuli from which to make interpretations would be a step forward in understanding the influences of nonverbal communication. This does not minimize the idea that codification focus in social perception will vary from situation to situation and from individual to individual.

Hypotheses forwarded by this writer are: there are individual differences in the acquired verbal and nonverbal vocabularies of people in relation to their perceptual selective abilities to decode meaning from several languages which are present in interaction. The dominant language processes will most likely be used by individuals when communicative stimuli are multitudinous.

Individual differentiations of vocabulary usage accounts for those perceptual selections of symbols, signs, objects, or actions which "carry meaning" for one person and not for another. Individuals may or may not be able to use those verbal and nonverbal vocabulary items in their own communicative behaviors at will.

This writer suggests that further research be conducted to determine if interpersonal perceptual bases can be identified. The two ends of an interpersonal perceptual continuum might be considered as the aesthetic perceptual base and consistency perceptual base.

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